

One in a Million



Among the millions of items in the collections of the State Historical Society of Iowa is this astonishing three-dimensional "sand painting" completed in 1888 by Andrew Clemens of McGregor.

Clemens was not the first to layer varicolored sands into a bottle, but certainly he mastered and perfected the art, creating incredibly intricate designs and pictures.

He gathered the sand from a stratus of St. Peter sandstone known as Pictured Rocks, a mile or so south of McGregor near Pike's Peak. In this nearly pure silica, the small traces of iron oxide present produced more than 40 exquisite colors.

To make a sand painting, Clemens first spread a particular color on blotting paper and rubbed it gently with a teaspoon. He used only the sand that adhered to the paper—the finest and most uniformly sized grains.

The work was executed upside down through the narrow mouth of the bottle—meaning that for the 12-inch bottle shown here, he first built the decorative bands above George Washington's head, not the reddish-brown layers at the bottle's neck.

Though his designs were sophisticated, his tools were not. He used a long, thin hickory stick with a quarter-teaspoon tin scoop on one end to put a chosen color of sand into the bottle; a similar stick with a hooked end to control the sand; and another to measure the outside of the bottle for perspective. With four more sticks of various weights and lengths, he packed and tamped the dry sand. No adhesives were used. The

(Article continues with another photo on inside back cover; please turn page.)